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RAW SEQUENCE LISTING

DATE: 04/03/2003

PATENT APPLICATION: US/10/038,895A

TIME: 12:06:46

Input Set : E:\3379.1.ST25.txt

Output Set: N:\CRF4\04032003\J038895A.raw

3 <110> APPLICANT: Kulp, David C.
 4 Siani-Euse, Michael A.
 5 Williams, Alan J.
 6 Haimon, Cyrus L.
 7 <120> TITLE OF INVENTION: Nucleic Acids Encoding G Proteins Coupled Receptors
 10 <130> FILE REFERENCE: 379.1
 11 <140> CURRENT APPLICATION NUMBER: 10/038,895A
C--> 13 <141> CURRENT FILING DATE: 2003-03-25
 14 <150> PRIOR APPLICATION NUMBER: US 60/244,082
 16 <160> PRIOR FILING DATE: 2000-10-26
 17 <161> NUMBER OF SEQ ID NOS: 20
 20 <170> SOFTWARE: PatentIn version 3.2
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 274
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Artificial Sequence
 25 <214> FEATURE:
 26 <215> OTHER INFORMATION: Synthetic Organism
 31 <216> FEATURE:
 32 <217> NAME/KEY: misc_feature
 33 <218> LOCATION: (135)..(136)
 34 <219> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
 36 <210> FEATURE:
 37 <217> NAME/KEY: misc_feature
 38 <218> LOCATION: (146)..(146)
 39 <219> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
 41 <400> SEQUENCE: 1
 42 Leu Leu Ala Pro Thr Gly Ser Leu Phe Arg Asn Cys Thr Gln Asp Gly
 43 1 5 10 15
 44 Trp Ser Glu Thr Phe Pro Arg Pro Asn Leu Ala Cys Gly Val Asn Val
 45 20 25 30
 46 Asn Asp Ser Ser Asn Glu Lys Arg Ser Tyr Leu Leu Lys Leu Lys Val
 47 35 40 45
 48 Met Tyr Thr Val Gly Tyr Ser Ser Ser Leu Val Met Leu Leu Val Ala
 49 50 55 60
 50 Leu Gly Ile Leu Cys Ala Phe Arg Arg Leu His Cys Thr Arg Asn Tyr
 51 65 70 75 8
 52 Ile His Met His Leu Phe Val Ser Phe Ile Leu Arg Ala Leu Ser Asn
 53 85 90 95
 54 Phe Ile Lys Asp Ala Val Leu Phe Ser Ser Asp Asp Val Thr Tyr Cys
 55 100 105 110
Wtc-> 71 Asp Ala His Arg Gly Cys Lys Leu Val Met Val Leu Phe Xaa Tyr Cys
 72 115 120 125

ENTERED

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75 Ile Met Ala Asn Tyr Ser Trp Leu Leu Val Glu Gly Ser Thr Phe Thr
76      140      135      140
77 His Lys Leu Ala Ile Ser Phe Phe Ser Glu Arg Lys Tyr Leu Gln Gly
78      145      150      155      160
79 Phe Val Ala Phe Gly Trp Gly Ser Pro Ala Ile Phe Val Ala Leu Trp
80      165      170      175
81 Ala Ile Ala Arg His Phe Leu Glu Asp Val Gly Cys Trp Asp Ile Asn
82      180      185      190
83 Ala Asn Ala Ser Ile Trp Trp Ile Ile Arg Gly Pro Val Ile Leu Ser
84      195      200      205
85 Ile Leu Asn Phe Ile Leu Phe Ile Asn Ile Leu Arg Ile Leu Met Arg
86      210      215      220
87 Lys Leu Arg Thr Gln Glu Thr Arg Gly Asn Glu Val Ser His Tyr Lys
88      225      230      235      240
89 Arg Leu Ala Arg Ser Thr Leu Leu Leu Ile Pro Leu Phe Gly Ile His
90      245      250      255
91 Tyr Ile Val Phe Ala Phe Ser Pro Glu Asp Ala Met Glu Ile Gln Leu
92      260      265      270
93 Phe Phe

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115 <11> SEQ ID NO: 1

116 <11> LENGTH: 381

117 <11> TYPE: DNA

118 <11> ORGANISM: Artificial Sequence

119 <11> FEATURE:

121 <12> OTHER INFORMATION: Synthetic Organism

123 <100> SEQUENCE: 1

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124 ctcttggaac caaacggtc ctgtttcaga aactgcacac aggatggctg gtcagaaacc      60
125 ttcccaagc caaatctggc ctgtggcggt aatgtgaacg actcttccaa cgagaagcgg      120
126 ctctctacc tctgaagct gaaagtcatg tacaccgctg gctacagctc ctccctggtc      180
127 aggtctctcg tctcccttgg cctctctgtg gctttccgga ggtctcaactg caactgcacac      240
128 tacaatcaca tgaactgtt cgtgtccttc atccttctgt cctgttccaa ctctcatcaag      300
129 gaggcgtgac tctctctctc agatgatgtc acctactggg atgcccacag ggcgggctgc      360
130 aacttggtca tgggtcgtt c

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139 <110> SEQ ID NO: 2

140 <110> LENGTH: 447

141 <110> TYPE: DNA

142 <110> ORGANISM: Artificial Sequence

143 <110> FEATURE:

145 <120> OTHER INFORMATION: Synthetic Organism

147 <110> FEATURE:

149 <111> NAME/KEY: misc_feature

150 <120> LOCATION: (58)..(58)

151 <120> OTHER INFORMATION: n is a, c, g, or t

152 <100> SEQUENCE: 2

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W--> 154 tactgcatca tggccaacta ctctggctg ctgggtggaag gctctacatt cacacatntc      60
155 ctcgcatctt cctctctctc tgaagaaaag tacctccagg gatttctggc attcggatgg      120
156 gttctccag ccatctttgt tctttctggg gctattgcca gacattttct ggaagatgtt      180
157 ggtgtctggg acatcaatgc caacgcctcc atctgggtga tcattctgtg tctgtgctc      240
158 ctctcatccc tgattaattt cctctcttct ataaacattc taagaatctt gatgagaaaa      300

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164 cttagaaccg aagaaacaag aggaatatgaa gtcagccatt ataagcgccg gccacaggtcc 360
166 actcctctgc tgatccccc ctctggcacc cactacatcg tcttgcgcct ctcccagag 410
168 gacqctatgg agatccagct gttttt 447
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172 <21> LENGTH: 828
173 <21> TYPE: DNA
174 <21> ORGANISM: Artificial Sequence
176 <21> FEATURE:
177 <21> OTHER INFORMATION: Synthetic Organism
180 <21> FEATURE:
181 <21> NAME/KEY: misc_feature
182 <21> LOCATION: (439)..(439)
183 <21> OTHER INFORMATION: n is a, c, g, or t
185 <400> SEQUENCE: 4
186 ctcttggcac caccagttc ctgttccga aactgcacac aggatggctg gtcagaaacc 60
188 ttccacagga ctatctggc ctgtggcgtt aatgtgaacg actcttccaa cgagaagcgg 110
190 cactctacc tctgaagct gaaagtcatg tacacgtgg gctacagctc ctccctggc 160
192 atctctctg tcccccctgg cactccctgt gcttccggga ggcctccactg cactcgaaac 210
194 ctatccaca tgcacctgt cgtgtccctc atctctctg cctgtccaa ctccatcaag 260
196 gacccctgc tctctctc agatgatgc aactactgg atgcccacag ggggggtgc 310
198 aatgtgaca tctgtctgt ctactgcac atggccaaact actcctggct gctggtggaa 360
W--> 200 ggctctacct tcacacatnt cctcgcctac tcctttctct ctgaaagaaa gtacctccag 480
202 tttctctg cctctctg ggggttccaa gcatctttg ttgctttgtg ggtattgac 540
204 agatcttct tgaagatgt tgggtctgtg gatccaatg ccaacgcac cactctgttg 600
206 atctctctg ctctctgt cctctccac ctgattaatt ccatcctct cctaaacatt 660
208 ctacaaatc tcttgaaaa acttagaacc caagaaacaa gaggaaatga agtcagcat 710
210 taaagagcc tgcacaggtc cactctctg ctgacccccc tctttggcat ccactacac 760
212 gttctgctc tcccccaga ggaagctatg gagatccaga tgtttttt 810
215 <21> SEQ ID NO: 5
216 <21> LENGTH: 120
217 <21> TYPE: PRT
218 <21> ORGANISM: Artificial Sequence
219 <21> FEATURE:
221 <21> OTHER INFORMATION: Synthetic Organism
223 <400> SEQUENCE: 5
224 Pro Thr Phe Ile Leu Phe Ser Phe Gln Pro Gly Asp Lys Arg Thr Lys
225 1 5 10 15
226 His Ile Cys Val Tyr Trp Glu Gly Ser Glu Gly Gly His Trp Ser Thr
227 20 25 30
228 Gln Gly Cys Ser His Val His Ser Asn Gly Ser Tyr Thr Lys Cys Lys
229 35 40 45
230 Cys Phe His Leu Ser Ser Phe Ala Val Leu Val Ala Leu Ala Pro Lys
231 50 55 60
232 Asp Pro Val Leu Thr Val Ile Thr Gln Val Gly Leu Thr Ile Ser Leu
233 65 70 75 80
234 Leu Cys Leu Phe Leu Ala Ile Leu Thr Phe Leu Leu Cys Arg Pro Ile
235 85 90 95
236 Gln Asn Thr Ser Thr Ser Leu His Leu Glu Leu Ser Leu Cys Leu Phe
237 100 105 110

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253 Leu Ala His Leu Leu Phe Leu Thr Gly Ile Asn Arg Thr Glu Pro Glu
254      115      120      125
257 Leu Cys Ser Ile Ile Ala Gly Leu Leu His Phe Leu Tyr Leu Ala Cys
258      130      135      140
261 Phe Thr Trp Met Leu Leu Gln Gly Leu His Leu Phe Leu Thr Val Arg
262 145      150      155      160
265 Asn Leu Lys Val Ala Asn Tyr Thr Ser Thr Gly Arg Phe Lys Lys Arg
266      165      170      175
269 Phe Met Tyr Pro Val Gly Tyr Gly Ile Pro Ala Val Ile Ile Ala Val
270      180      185      190
273 Ser Ala Ile Val Gly Pro Gln Asn Tyr Gly Thr Phe Thr His Cys Trp
274      195      200      205
277 Leu Lys Leu Asp Lys Gly Phe Ile Trp Ser Phe Met Gly Pro Val Ala
278      210      215      220
281 Val Ile Ile Leu Asn Leu Val Phe Tyr Phe Gln Val Leu Trp Ile Leu
282 225      230      235      240
285 Arg Ser Lys Leu Ser Ser Leu Asn Lys Glu Val Ser Thr Ile Gln Asp
286      245      250      255
289 Thr Arg Val Met Thr Phe Lys Ala Ile Ser Gln Leu Phe Ile Leu Gly
290      260      265      270
293 Cys Ser Trp Gly Leu Gly Phe Phe Met Val Glu Glu Val Gly Lys Thr
294      275      280      285
297 Ile Gly Ser Ile Ile Ala Tyr Ser Phe Thr Ile Ile Asn Thr Leu Gln
298      290      295      300
301 Gly Val Leu Leu Phe Val Val His Cys Leu Leu Asn Arg Gln Val Arg
302 305      310      315      320

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303 <11> SEQ ID NO: 6

304 <11> LENGTH: 969

305 <12> TYPE: DNA

306 <13> ORGANISM: Artificial Sequence

307 <14> FEATURE:

308 <15> OTHER INFORMATION: Synthetic Organism

309 <16> SEQUENCE: 6

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314 ccaactttcc tactattctc ttccagccct ggtagacaaga gaacaaacaa tatctgtgtc      60
316 tactgggagg gatcagaggg aggcacatgg tccacgggagg gctgtctcca tgtgcacagc      120
318 acggtttctt acaccaaatt caagtgtctc catctgtcca gatttgcagt cctcgttgtt      180
320 ctgtccccca aggaggaccc tgttgtgacc gtagtcaccc aggtgggggt gaacatctct      240
322 cgtgtgtgac tcttcctggc catctccacc ttctctctgt gcgggacccat ccagaaaccc      300
324 acaacctccc tccatctaga gctctccctc tgcctcttcc tggccaccc cctgttctgt      360
326 acgggcacaa acagaactga gcttgaggtg cctgtgtcca tcattggagg gctgtctcac      420
328 tctctctacc tggcttggtt cacttggtat cctctgggaag ggtctgaccc cttctctacc      480
330 gtccaggaacc tcaaggtggc caactacacc agcacgggca gattcaagaa gaggttctat      540
332 tccctgttag gtaacgggat cccagctgtg attattgtgt tgtcaggaat agttggaccc      600
334 cagaattatg caacatttac tcaatgttgg ctcaagcttg ataaaaggatt catctggagc      660
336 tccatggggc cagtacgagt catctctctg ataaaacttg tttctactt ccaagttctg      720
338 tgatttttga gaagcaaac ttctctctc aataaagaag ttccacccat tcaggacacc      780
340 aaagtcacga catctaaagc catctctcag ctatttatcc tgggtgtgtt ttggggcctt      840
342 gtttttttta tgggtgaaga agtaggggaag acgattggat caatcattgc atactcatc      900
344 acatcatcca acaccttcca gggagtgttg ctctttgttg tacactgtct ccttaacgc      960

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Input Set : E:\3379.1.ST25.txt

Output Set: N:\CRF4\04032003\J038895A.raw

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346 caggtaagg
347 <110> SEQ ID NO: 7
350 <111> LENGTH: 217
351 <112> TYPE: PRO
352 <113> ORGANISM: Artificial Sequence
353 <120> FEATURE:
354 <130> OTHER INFORMATION: Synthetic Organism
357 <400> SEQUENCE: 7
358 Gln His Ser Asp Ala Val His Asp Leu Leu Leu Asp Val Ile Thr Trp
360 1 5 10 15
361 Val Gly Ile Leu Leu Ser Leu Val Cys Leu Leu Ile Cys Ile Phe Thr
363 20 25 30
364 Phe Cys Phe Phe Arg Gly Leu Gln Ser Asp Arg Asn Thr Ile His Lys
366 35 40 45
367 Asn Leu Cys Ile Ser Leu Phe Val Ala Glu Leu Leu Phe Leu Ile Gly
369 50 55 60
370 Ile Asn Arg Thr Asp Gln Pro Ala Cys Ala Val Phe Ala Ala Leu Leu
372 65 70 75 80
373 His Phe Phe Phe Leu Ala Ala Phe Thr Trp Met Phe Leu Glu Gly Val
375 85 90 95
376 Gln Leu Tyr Ile Met Leu Val Glu Val Phe Glu Ser Glu His Ser Arg
378 100 105 110
379 Arg Lys Tyr Phe Tyr Leu Val Gly Tyr Gly Met Pro Ala Leu Ile Val
381 115 120 125
382 Ala Val Ser Ala Ala Val Asp Tyr Arg Ser Tyr Gly Thr Asp Lys Val
384 130 135 140
385 Cys Trp Leu Arg Leu Asp Thr Tyr Phe Ile Trp Ser Phe Ile Gly Pro
387 145 150 155 160
388 Ala Thr Leu Ile Ile Met Asn Val Ile Phe Leu Gly Ile Ala Leu Tyr
390 165 170 175
391 Lys Met Phe His His Thr Ala Ile Leu Lys Pro Glu Ser Gly Cys Leu
393 180 185 190
394 Asp Asn Ile Lys Leu Lys Ile Asn Ile Pro Ile Ile Lys Ser Ile Tyr
396 195 200 205
401 Ile Tyr Met Tyr Ile Cys Met Cys Val
403 210 215

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969

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415 <110> SEQ ID NO: 8
416 <111> LENGTH: 657
417 <112> TYPE: DNA
418 <113> ORGANISM: Artificial Sequence
419 <120> FEATURE:
420 <130> OTHER INFORMATION: Synthetic Organism
423 <400> SEQUENCE: 8
424 caggcacagtg atggcggtcca tgacgtcctt ctgggatgtga tcacgtgggt tggaaatttg 60
426 cgtgcctttg ttgtctcct gatttgcac tccacatttt gctttttcag ggggctccag 120
428 aatgacagta acaccatcca caagaacctc tgcacagtc tctttgtagc agagctgttc 180
430 ttcttgattg ggtacaaacc aactgaccaa ccaattgctt gtgtgtttt cgtgcccctg 240
432 ttaacattct tttcttggg tgccttcacc tggatgttcc tggagggggg gcagctttat 300
434 atcatgttgg tggaggtttt tgagagttaa catcacgta ggaaataatt ttatctggtc 360

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/038,895A

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 126,146
Seq#:3; N Pos. 58
Seq#:4; N Pos. 439
Seq#:19; Xaa Pos. 370

VERIFICATION SUMMARY

DATE: 04/03/2003

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Input Set : E:\3379.1.ST25.txt

Output Set: N:\CRF4\04032003\J038895A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:112
M:341 Repeated in SeqNo=1
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:420
L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:368